CLAIMS

1. A coplanar waveguide line comprising

a substrate;

a central electrode strip on the substrate;

first and second electrode strips disposed on opposite sides of the central electrode strip and extending parallel thereto;

first and second optical waveguides on the substrate, the optical waveguides being positioned between the first and central electrode strips and extending parallel thereto;

the central electrode comprising at least one T-rail extending proximate to the first optical waveguide;

the first electrode comprising at least one T-rail extending proximate to the second optical waveguide;

the substrate comprising an n^+ electrically conducting layer extending between the optical waveguides;

wherein the coplanar waveguide line further comprises an electrical connection between first and second electrode strips.

2. A coplanar waveguide line as claimed in claim 1, wherein the electrical connection between first and second electrode strips is an airbridge.

3. A coplanar waveguide line as claimed in claim 1, wherein the electrical connection is wire bonded between the first and second electrode strips.

4. A coplanar waveguide line as claimed in claim 1, wherein the electrical connection between first and second electrodes extends through the back of the substrate.

5. A coplanar waveguide line as claimed in any one of claims 1 to 4, comprising a plurality of electrical connections between first and second electrode strips, the electrical connections preferably being equally spaced.

6. A coplanar waveguide line as claimed in any one of claims 1 to 5, wherein at least one of the central electrode strip and first electrode strip comprises a plurality of T-rails, preferably equally spaced.

7. A coplanar waveguide line as claimed in any one of claims 1 to 6, wherein the T-rail comprises a contact pad electrically connected to the corresponding electrode strip by an airbridge.

8. A coplanar waveguide line as claimed in claim 7, wherein the contact pad abuts the optical waveguide.

9. A coplanar waveguide line as claimed in any one of claims 1 to 8, wherein the substrate comprises a first isolation trench which extends through the n^+ electrically conducting layer between the first electrode strip and optical waveguides.

10. A coplanar waveguide line as claimed in any one of claims 1 to 9, wherein the substrate comprises a second isolation trench extending through the n^+ electrically

conducting layer between the central electrode strip and the optical waveguides.

11. A coplanar waveguide line as claimed in any one of claims 1 to 10, wherein the substrate comprises a third isolation trench extending through the n^+ electrically conducting layer between the central electrode strip and the second electrode strip.

12. A Mach-Zehnder modulator including a coplanar waveguide line as claimed in any one of claims 1 to 11.

13. A coplanar waveguide line substantially as hereinbefore described.

14. A coplanar waveguide line substantially as hereinbefore described with reference to the drawings.

15. A Mach-Zehnder modulator substantially as hereinbefore described.

16. A Mach-Zehnder modulator substantially as hereinbefore described with reference to the drawings.